PLASMID

A Journal Focused on Extrachromosomal Gene Systems and Mobile Genetic Elements in Prokaryotes and Eukaryotes

Volume 36 • 1996

EDITOR-IN-CHIEF

Francis L. Macrina

ACADEMIC PRESS

San Diego New York Boston
London Sydney Tokyo Toronto

http://www.apnet.com

Copyright © 1996 by Academic Press

All rights reserved

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the Publisher.

The appearance of the code at the bottom of the first page of an article in this journal indicates the Publisher's consent that copies of the article may be made for personal or internal use, or for the personal or internal use of specific clients. This consent is given on the condition, however, that the copier pay the stated per copy fee through the Copyright Clearance Center, Inc. (222 Rosewood Drive, Danvers, Massachusetts 01923), for copying beyond that permitted by Sections 107 or 108 of the U. S. Copyright Law. This consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale. Copy fees for pre-1996 articles are as shown on the article title pages; if no fee code appears on the title page, the copy fee is the same as for current articles.

0147-619X/96 $18.00

MADE IN THE UNITED STATES OF AMERICA

This journal is printed on acid-free paper.

Contents of Volume 36

Number 1, July 1996

Loubna Ben-Abdallah Chaouni, Jerome Etienne, Timothy Greenland, and François Vandenesch. Nucleic Acid Sequence and Affiliation of pLUG10, a Novel Cadmium Resistance Plasmid from *Staphylococcus lugdunensis* 1

Francis L. Macrina, Kevin R. Jones, and Patrick Laloi. Characterization of IS*199* from *Streptococcus mutans* V403 9

Manuel S. Valenzuela, K. A. I. Siddiqui, and B. L. Sarkar. High Expression of Plasmid-Encoded Tetracycline Resistance Gene in *E. coli* Causes a Decrease in Membrane-Bound ATPase Activity 19

Catherine Llanes, Philippe Gabant, Martine Couturier, Laurence Bayer, and Patrick Plesiat. Molecular Analysis of the Replication Elements of the Broad-Host-Range RepA/C Replicon 26

Short Communications

Serge Ankri, Isabelle Bouvier, Oscar Reyes, Florence Predali, and Gérard Leblon. A *Brevibacterium linens* pRBL1 Replicon Functional in *Corynebacterium glutamicum* 36

Dominique M. Galli, Jodie L. Polan-Curtain, and Donald J. LeBlanc. Structural and Segregational Stability of Various Replicons in *Actinobacillus actinomycetemcomitans* 42

Luisa Brito, Graça Vieira, Mário A. Santos, and Helena Paveia. Nucleotide Sequence Analysis of pOg32, a Cryptic Plasmid from *Leuconostoc oenos* 49

Koichi Tanimoto, Haruyoshi Tomita, and Yasuyoshi Ike. The *traA* Gene of the *Enterococcus faecalis* Conjugative Plasmid pPD1 Encodes a Negative Regulator for the Pheromone Response 55

Dinesh Goyal, Masaaki Wachi, Nobuyuki Kijima, Miki Kobayashi, Hideaki Yukawa, and Kazuo Nagai. A Cryptic Plasmid pBL1 from *Brevibacterium lactofermentum* Causes Growth Inhibition and Filamentation in *Escherichia coli* 62

Manuel Zúñiga, Isabel Pardo, and Sergi Ferrer. Nucleotide Sequence of Plasmid p4028, a Cryptic Plasmid from *Leuconostoc oenos* 67

Number 2, September 1996

Lars Andrup, Ole Jørgensen, Andrea Wilcks, Lasse Smidt, and Gert B. Jensen. Mobilization of "Nonmobilizable" Plasmids by the Aggregation-Mediated Conjugation System of *Bacillus thuringiensis* 75

C. Barth, Z. Wilczynska, L. Pontes, D. J. Fraser, and P. R. Fisher. Efficient Circularization in *Escherichia coli* of Linear Plasmid Multimers from *Dictyostelium discoideum* Genomic DNA 86

Peter B. Thorsted, Deepan S. Shah, Donia Macartney, Kalliopi Kostelidou, and Christopher M. Thomas. Conservation of the Genetic Switch between Replication and Transfer Genes of IncP Plasmids but Divergence of the Replication Functions Which Are Major Host-Range Determinants 95

Short Communications

Tatyana Podolsky, Sheik-Tao Fong, and Barry T. O. Lee. Direct Selection of Tetracycline-Sensitive *Escherichia coli* Cells Using Nickel Salts 112

Chuen-Fu Lin, Zon-Fa Fung, Chwein-Li Wu, and Tung-Ching Chung. Molecular Characterization of a Plasmid-Borne (pTC82) Chloramphenicol Resistance Determinant (*cat*-TC) from *Lactobacillus reuteri* G4 116

Sophie Foley, Sierd Bron, Gerard Venema, Charles Daly, and Gerald F. Fitzgerald. Molecular Analysis of the Replication Origin of the *Lactococcus lactis* Plasmid pCI305 125

Number 3, November 1996

Hiroshi Yonemitsu, Toshiaki Fujihashi, Hirotaka Higuchi, Howard Hong, Hideaki Morishige, Shunji Mochida, and Akira Kaji. Instability of Rts1 (Drug-Resistant Factor) Replicon: Stabilization by DNA Fragments Derived from Rts1 143

L. Boe and K. V. Rasmussen. Suggestions as to Quantitative Measurements of Plasmid Loss 153

L. Boe. Estimation of Plasmid Loss Rates in Bacterial Populations with a Reference to the Reproducibility of Stability Experiments 161

Birgit Wetterauer, Piero Morandini, Irene Hribar, Irene Murgia-Morandini, Ursula Hamker, Charles Singleton, and Harry K. MacWilliams. Wild-Type Strains of *Dictyostelium discoideum* Can Be Transformed Using A Novel Selection Cassette Driven by the Promoter of the Ribosomal V18 Gene 169

Nicolas Réhel and George Szatmari. Characterization of the Stable Maintenance of the *Shigella flexneri* Plasmid pHS-2 183

Shahida Hasnain and Christopher M. Thomas. Two Related Rolling Circle Replication Plasmids from Salt-Tolerant Bacteria 191

Short Communication

Deborah D. Jaworski, Susan E. Flannagan, and Don B. Clewell. Analyses of *traA, int-Tn,* and *xis-Tn* Mutations in the Conjugative Transposon Tn*916* in *Enterococcus faecalis* 201

Author Index for Volume 36 209

Cumulative Subject Index for Volumes 35–36 210